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# **QMS<sup>®</sup> magicolor<sup>®</sup> 6100 Print System Technical Specifications**

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# Requirements

## Location Requirements

- Away from cooling and heating sources, extreme temperature changes, direct sunlight, excessive dust, corrosive chemicals or vapors (such as ammonia), water pipes, refrigerators, and any strong electromagnetic field (such as that created by an air conditioner).

If the printer is located in a cold room that is rapidly heated, or if the printer is moved from a cold place to a warm, humid place, condensation may occur within the printer, degrading print quality. If this occurs, allow the printer to adapt to the environment for about one hour before use.

- Away from open flames or items that can easily burn (such as curtains).
- Away from items that produce excessive vibration.
- In an area with an ambient temperature range of 50°–90.5° F (10°–32.5° C) and relative humidity range of 20%–80% (noncondensating).
- At an altitude of 0–8200' (0–2500 m).
- On a hard, flat, level surface capable of supporting the printer with consumables.

◆ **Caution:** *For best output quality and longest consumables life, install the printer on a hard, flat, level (within 1.5°) surface capable of supporting about 119 lbs (54 kg) for the N, GN or EN models, or 184 lbs (83.5 kg) for the DP model. A surface can be tested for levelness with a standard round pencil. If the pencil rolls, the surface is not level. Clear the area of any obstruction or items such as cables that might prevent the printer from sitting directly on the flat, level surface.*

- Near your computer—6.5' (2 m) or less for an IEEE 1284 bidirectional parallel connection; cables for other connections may be longer.
- Close to an easily accessible power supply on an exclusively dedicated power outlet.

Don't connect it to the same electrical outlet as noise-generating equipment. If the printer is connected to the same circuit used by other high-current machines, such as a copier or air conditioner, or to an electrically noisy machine, low voltage or noise may cause overheating, computing errors resulting in data loss, and improper performance.

- In a well-ventilated area, but away from wind that can blow on it.

## Requirements

- With enough space to allow adequate ventilation and easy servicing.
- ◆ **Caution:** *The printer has ventilation grilles on the side and back, which must remain unobstructed for safe operation. Refer to your Installation Guide for location requirements. Obstructing the grilles could present a fire hazard. Also, to allow proper operation of the printer, including replacement of consumables and routine checks, the illustrated clearances should be provided.*
- Away from water.

Also, when used near a humidifier, impurities in the water may be released into the air, where they can accumulate inside the printer and cause degraded printer output. If using a humidifier or water vaporizer in the room with the printer, use only purified or distilled water.

## Power Requirements

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- ⚡ **WARNING!** *Connect the power plug to an outlet with the same rated voltage as the printer (120 or 240 V), and fused for at least 15 amperes (8 amperes for 240 V). No other devices should be connected to this outlet, as overheating could cause fire or electric shock. The printer draws 11 A at 120 V, or 6 A at 240 V. Your printer requires a properly grounded AC outlet with a rated line voltage of 120 V or 220–240 V. The grounding terminal on the power cable should be connected to a good earth ground to prevent electric shock and fire.*

**ACHTUNG!** *Schließen Sie das Netzkabel an eine Stromquelle an, die gleiched Voltzahl wie der Drucker hat (120 oder 240 V) und mindestens 15 Ampere gesichert ist (8 Ampere für 240 V). Schließen Sie keine anderen Geräte an diesen Ausgang an, da sonst als Folge von Überhitzung Feuergefahr oder Gefahr eines Stromschlags herrscht. Der Drucker zieht 11 A bei 120 V, oder 6 A bei 240 V. Ihr Drucker benötigt einen geerdeten AC Ausgang mit geregelter Gleichstrom mit 120 V oder 220-240 V. Der Erdungsanschluß des Stromkables sollte gut geerdet werden, um Stromschläge und Feuer zu vermeiden.*

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- » **Note:** *In compliance with UL guidelines, “The appliance inlet is considered to be the main disconnect device.”*

|         |                                                         |
|---------|---------------------------------------------------------|
| Fused   | For at least 15 amperes (8 amperes for 240 V).          |
| Printer | Draws 11 A at 120 V, or 6 A at 240 V, or 13 A at 100 V. |

## Requirements

|                                            |                                                                                                                          |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Rated Line Voltage                         | Voltage of 100V, 120 V, or 220–240 V must remain within $\pm 10$ percent of the rated line voltage for proper operation. |
| Amperage Capacity of the Electrical Outlet | Amperage capacity at least 1.2 times that used by the printer.                                                           |
| Maximum Electrical Current                 | Required during operation is 11 amps for a 120 V system, 6 amps for a 220–240 V system and 13 amps for a 100 V system.   |
| Noise-generating Equipment                 | Should not be connected to the same electrical outlet as the printer.                                                    |
| Recommended Frequency                      | 60 Hz $\pm 2$ Hz for a 120 V system, and 50 Hz $\pm 2$ Hz for a 220–240 V system.                                        |

- Your printer requires a properly grounded AC outlet with a rated line voltage of 100 V, 120 V, or 220-240 V.
- The line voltage must remain within  $\pm 10$  percent of the rated voltage for proper operation of the printer.
- The amperage capacity of the electrical outlet must be at least 1.2 times that used by the printer.
- Noise-generating equipment should not be connected to the same electrical outlet as the printer.
- The recommended frequency is 50–60 Hz  $\pm 2$  Hz for a 100 V system, 60 Hz  $\pm 2$  Hz for a 120 V system, and 50 Hz  $\pm 2$  Hz for a 220-240 V system.

## Requirements

### Energy Star Compliance

The QMS *magicolor* 6100 Print System Print System is compliant with US Environmental Protection Agency (EPA) Energy Star regulations. After a specified period of inactivity, the printer changes to a low-power state (the engine remains on, but the fuser turns off). When a print job is received, the printer returns to normal power within a user-configurable time period.



### Year 2000 (Y2K) Compliance

QMS would like to reassure its customers by pointing out that the design of its products precludes the possibility of Year 2000 errors.

There are two instances when time and date information is provided by QMS printers: when information about a print job is stored in the QMS accounting file, and when a time stamp is printed on the header and/or trailer page. Date and time information that appears on the header and/or trailer page is passed to the QMS printer by the host computer. Since this information is passed in real time, it is virtually impossible for there to be any confusion regarding the century date. The real-time clock used to apply the time stamp to the accounting files stores the year as four digits and is designed to correctly handle leap year calculations, including the Year 2000.



### Computer Requirements

Printer performance depends upon the type of computer to which you connect it. We recommend a Pentium-class computer with at least 16 MB of RAM (if you're using Windows 95/98) or 32 MB of RAM (if you're using Windows NT 4.0).

# Engine and Controller Specifications

## Engine

|                                      |                          |                |
|--------------------------------------|--------------------------|----------------|
| Engine                               | Hitachi Color Laser SL-3 |                |
| Maximum duty cycle                   | <b>Monochrome</b>        | <b>4-Color</b> |
| Simplex letter/A4<br>pages per month | 75,000 pages             | 18,750 pages   |

## Print Speed Simplex

The following table defines the expected print speed in Pages Per Minute (ppm).

| Page size | Monochrome<br>ppm | 2-Color<br>ppm | 3-Color<br>ppm | 4-Color<br>ppm |
|-----------|-------------------|----------------|----------------|----------------|
| A4        | 24                | 12 (8*)        | 8              | 6              |
| Letter    | 24                | 12 (8*)        | 8              | 6              |
| Legal     | 12                | 6              | 4              | 3              |
| A3        | 12                | 6 (4*)         | 4              | 3              |
| Ledger    | 12                | 6 (4*)         | 4              | 3              |
| Oversize  | 12                | 6 (4*)         | 4              | 3              |
| Film      | 12                | 3.9 (3.3**)    | 3.4            | 3              |
| Label     | 4.6               | 3.9 (3.2**)    | 3.4            | 3              |
| Thick     | 4.6               | 3.9 (3.2**)    | 3.4            | 3              |

\* Reduced 2-color page rate for Black/Yellow and Cyan/Magenta combinations

\*\* Reduced 2-color page rate for Black/Yellow combination only

## Print Speed Duplex

The following table defines the expected print speed in Pages Per Minute (ppm).

| Page size | Monochrome<br>ppm | 2-Color<br>ppm | 3-Color<br>ppm | 4-Color<br>ppm |
|-----------|-------------------|----------------|----------------|----------------|
| A4        | 12                | 4              | 4              | 6              |
| Letter    | 12                | 4              | 4              | 6              |
| Legal     | 6                 | 3              | 2              | 1.5            |
| A3        | 6                 | 3              | 2              | 1.5            |
| Ledger    | 6                 | 3              | 2              | 1.5            |
| Oversize  | 6                 | 3              | 2              | 1.5            |
| Film      | N/A               | N/A            | N/A            | N/A            |
| Label     | N/A               | N/A            | N/A            | N/A            |
| Thick     | 2.4               | 2.4 (2*)       | 2              | 1.5            |

\* Reduced 2-color page rate for Black/Yellow combination only

## General

|              |                                                                                                                                                                                                                                                                                                                           |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Printer type | Desktop, non-impact, 4-color printer                                                                                                                                                                                                                                                                                      |
| Print method | <b>Scanner:</b> Semiconductor laser with rotating mirror<br><b>Recorder:</b> Black writing electrophotographic<br><b>Process:</b> Cyan, magenta, yellow, and black dry toner image transfer to print media<br><b>Fuser:</b> Heated rollers                                                                                |
| Resolution   | <b>Standard:</b> 300x300 and 600x600 dpi (1200x1200 dpi standard on GN, EN and DP models)<br><b>Optional:</b> 1200x1200 dpi (additional DRAM may be required. See the "Memory" section of chapter 3, "Technical Information" in your <i>Reference</i> manual for memory requirements and usage considerations)            |
| Toner        | <b>Type:</b> Microfine, dry, single component<br><b>Packaging:</b> User-replaceable cartridges<br>» <b>Note:</b> <i>Keyed toner cartridges are available from your local vendor. See appendix A, "QMS Customer Support," in any of your magicolor 6100 printer manuals for a list of locations and telephone numbers.</i> |



|                      |                                                                                                                                                             |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Warm-up time</b>  | <b>Maximum:</b> 210 seconds<br><b>Typical:</b> 180 seconds from power on, assuming normal temperature and humidity                                          |
| <b>Input sources</b> | <b>Standard:</b> 250-sheet cassette<br><b>Optional:</b> 500-sheet lower input feeder<br>» <b>Note:</b> <i>Up to 2 lower input feeders may be installed.</i> |
| <b>Output</b>        | 250-sheet tray on top of printer                                                                                                                            |

## Consumable Life Expectancies

The stated life expectancy of each consumable is based on printing under specific operating conditions, such as media type, number of color planes, page size, and page coverage (usually 5% coverage of letter/A4-size media). The actual life expectancy will vary depending on these and other printing variables, including continuous or intermittent printing, ambient temperature, and humidity.

- » **Note:** *Consumables for the QMS magicolor 6100 Print System are available from your local vendor. See appendix A, “QMS Customer Support,” in any of your magicolor 6100 printer manuals for a list of locations and telephone numbers.*

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |                                           |               |                                          |                |                                          |             |                                          |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------|---------------|------------------------------------------|----------------|------------------------------------------|-------------|------------------------------------------|
| <b>Cleaning roller</b>                                 | 20,000 pages** at 5% coverage of each color                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                           |               |                                          |                |                                          |             |                                          |
| <b>Fuser oil</b>                                       | 12,000 pages** Fuser oil bottle life is media dependent: coarser paper requires more oil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                                           |               |                                          |                |                                          |             |                                          |
| <b>Fuser unit</b>                                      | 100,000 pages** maximum at an equal mix of black and 4-color pages, all with 5% coverage of each color. Fuser life is media dependent.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                           |               |                                          |                |                                          |             |                                          |
| <b>OPC belt cartridge</b>                              | Maximum 120,000 planes* (usually occurs with continuous use; minimum life — 60,000 planes, may occur with job sizes averaging one page although other factors also affect cartridge life.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |                                           |               |                                          |                |                                          |             |                                          |
| <b>Toner cartridges</b><br>(QMS toner cartridges only) | <table> <tr> <td><b>Black</b></td><td>14,000 pages* per cartridge @ 5% coverage</td></tr> <tr> <td><b>Yellow</b></td><td>8,500 pages* per cartridge @ 5% coverage</td></tr> <tr> <td><b>Magenta</b></td><td>8,500 pages* per cartridge @ 5% coverage</td></tr> <tr> <td><b>Cyan</b></td><td>8,500 pages* per cartridge @ 5% coverage</td></tr> </table> <p>» <b>Note:</b> <i>The toner cartridges in many laser printers are sensitive to bright light because they contain a light-sensitive print drum. The toner cartridges in your QMS magicolor 6100 Print System do not contain a print drum and, therefore, are not sensitive to light.</i></p> | <b>Black</b> | 14,000 pages* per cartridge @ 5% coverage | <b>Yellow</b> | 8,500 pages* per cartridge @ 5% coverage | <b>Magenta</b> | 8,500 pages* per cartridge @ 5% coverage | <b>Cyan</b> | 8,500 pages* per cartridge @ 5% coverage |
| <b>Black</b>                                           | 14,000 pages* per cartridge @ 5% coverage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |                                           |               |                                          |                |                                          |             |                                          |
| <b>Yellow</b>                                          | 8,500 pages* per cartridge @ 5% coverage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                                           |               |                                          |                |                                          |             |                                          |
| <b>Magenta</b>                                         | 8,500 pages* per cartridge @ 5% coverage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                                           |               |                                          |                |                                          |             |                                          |
| <b>Cyan</b>                                            | 8,500 pages* per cartridge @ 5% coverage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                                           |               |                                          |                |                                          |             |                                          |

## Engine and Controller Specifications

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste toner pack | 18,000 pages** at 5% coverage of each color                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Notes            | <p>*A <b>plane</b> is a single pass of the OPC belt (one toner color). For example, a one -color, single-sided (simplex) print job makes one pass (one plane), and a two-color print job makes two passes (two planes).</p> <p>**A single-sided <b>page</b> (also called a <b>face</b>) consists of four passes (or planes) of the OPC belt, since most color print jobs use all four toner colors. A two-sided (also known as duplex or two-faced) color page may consist of up to eight passes of the OPC belt, since most color print jobs use all four toner colors.</p> <p>Consumable life is expressed in simplex letter/A4 pages (1 face). A duplex page (2 faces) is equivalent to two simplex pages.</p> <p>The set of toner cartridges that are shipped with the printer have less capacity and will only print 1/2 of the number of pages listed for replacement toner cartridges.</p> <p>The number of sheets/faces printed shown on the startup page differs from the number of sheets/faces printed statistics in CrownView and on the consumables statistics page (Operator Control/Consumables/Print Statistics). The numbers on the startup page refer to to number of sheets/faces printed during the lifetime of the printer. The numbers in CrownView and on the consumables statistics page refer to the number of sheets/faces printed to date during the current consumables tracking period (Administration/Consumables/Start Period menu).</p> |

## Controller

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CPU</b>                 | IDT RC64474, operating at 200 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Resident emulations</b> | <p><b>PostScript</b>—Level 2 (300/600/1200 dpi)</p> <p><b>HP PCL</b>—PCL5c, PCL XL, PCL5e/GL2 (HP PaintJet XL300 compatible; 300/600 dpi; 300/600/1200 dpi, GL2 only)</p> <p>» <b>Note:</b> <i>You can use any of the Hewlett-Packard series of drivers with this printer; however, we recommend the LaserJet 4P or DeskJet 1200C for monochrome, or the DeskJet 1200C for color. You can download Hewlett-Packard drivers from the Hewlett-Packard website at <a href="http://www.hp.com">http://www.hp.com</a>. We recommend that if you print using a Hewlett-Packard printer driver, you disable PJL commands within the driver settings.</i></p> <p><b>PDF</b>—Version 1.2</p> <p><b>HP-GL</b>—7475A/7550/Draftmaster (300/600 dpi)</p> <p><b>Lineprinter</b>—(300/600 dpi)</p> |
| <b>Optional emulations</b> | <p>ImageServer (monochrome only)</p> <p>CGM</p> <p>LN03 Plus (300 dpi monochrome only)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Fonts</b>               | <p><b>PostScript</b>—252 resident PostScript fonts that can be scaled from 4 points upward and rotated to any angle in 1° increments; all typefaces have multilingual character sets</p> <p><b>HP PCL 5e, 5c</b>—45 scalable and 9 bitmapped typefaces</p> <p><b>PCL XL</b>—45 scalable and 9 bitmapped typefaces</p> <p><b>HP-GL</b>—40 resident HP-GL symbol sets</p> <p><b>Type 1 / Type 3 Support</b>—Support for Type 1 and Type 3 host-resident downloadable PostScript fonts</p> <p><b>TrueType</b>—Support for Type 42 (PostScript format) host-resident downloadable TrueType fonts, support for TrueType fonts in PCL</p>                                                                                                                                                  |
| <b>Optional fonts</b>      | <b>Hard disk</b> —QMS Kanji Internal IDE Hard Disk                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Standard interfaces</b> | <p><b>CrownNet Ethernet</b>—10BaseT/100BaseTX</p> <p><b>Parallel</b>—Centronics/IEEE 1284 bidirectional</p> <p><b>Serial</b>—RS-232C</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Engine and Controller Specifications

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Optional interfaces</b>                  | <p><b>Interface</b>—Support for one LocalTalk interface or one optional network interface (CrownNet Ethernet, supporting EtherTalk, LAN Manager/LAN Server, Netware, and TCP/IP; CrownNet Token-Ring, supporting LAN Manager/LAN Server, NetWare, and TCP/IP; or DECnet-TCP/IP)</p> <p><b>SCSI interface</b>—Support for up to 3 external SCSI hard disks (up to 2.2 GB)/Jaz drives/Zip drives</p>                                                                                                                                                                         |
| <b>RAM</b>                                  | <p><b>Type:</b> PC-100 Compliant SDRAM DIMMs</p> <p><b>N model base system RAM:</b> 64 MB</p> <p><b>GN and EN model base system RAM:</b> 192 MB</p> <p><b>DP model base system RAM:</b> 384 MB</p> <p><b>Total RAM:</b> Upgradable to 384 MB (through 3 DIMM connectors)</p>                                                                                                                                                                                                                                                                                               |
| <b>Optional RAM</b>                         | 32, 64, and 128 MB DIMMs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>System software</b>                      | Softloadable; stored in Flash ROM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Internal IDE hard disk</b>               | <p><b>N and GN models:</b> Optional, up to 2.2 GB</p> <p><b>EN and DP models:</b> Standard, up to 2.2 GB</p> <p>» <b>Note:</b> For information about hard disks recommended for your printer, see the <i>QMS magicolor 6100 Answer Base</i> through the Internet at <a href="http://www.qms.com/support/index6100.html">http://www.qms.com/support/index6100.html</a>, or contact the QMS Customer Response Center. See appendix A, “QMS Customer Support,” in any of your <i>magicolor 6100</i> printer manuals for a complete listing of support telephone numbers..</p> |
| <b>Time-of-day clock</b><br>(Y2K compliant) | <p><b>N and GN models:</b> Optional (socket provided for)</p> <p><b>EN and DP models:</b> Standard</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Security key</b>                         | Optional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Job accounting</b>                       | Crown job accounting; requires an optional IDE drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Warning function</b>                     | Optional, QMS BuzzBox (light/buzzer printer warning device); operates over a parallel connection                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Color scanner/copier</b>                 | Optional, QMS SC-200 or QMS SC-200 with Automatic Document Feeder (ADF); operates over a parallel connection                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Electrical

### Voltage and Power

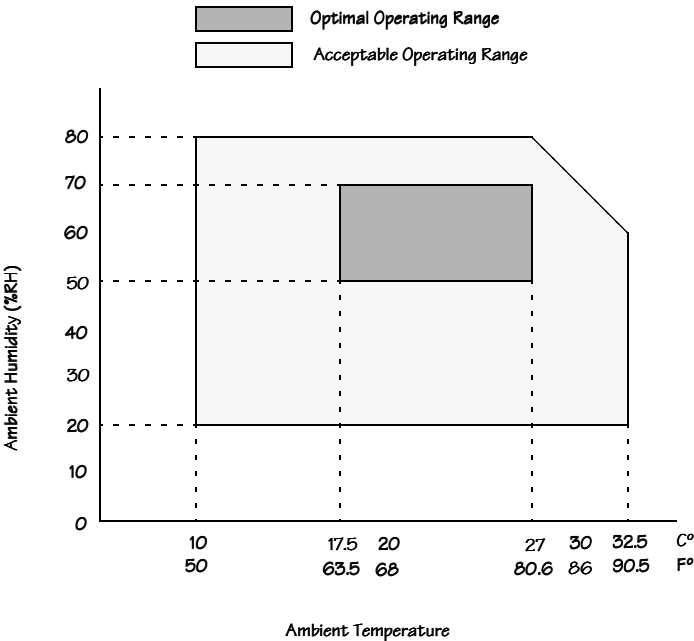
|                              |                                                                                                                                                                                           |                             |                                      |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|
| <b>Voltage and frequency</b> | <b>US:</b> 120 volts $\pm 10\%$ at 60 Hz $\pm 2$ Hz<br><b>Japan:</b> 100 volts $\pm 10\%$ at 50/60 Hz $\pm 2$ Hz<br><b>International:</b> 220-240 volts $\pm 6/-10\%$ at 50 Hz $\pm 2$ Hz |                             |                                      |
| <b>Phase</b>                 | Single                                                                                                                                                                                    |                             |                                      |
| <b>Power consumption</b>     | <b>Mode</b>                                                                                                                                                                               | <b>Average</b>              | <b>Maximum</b>                       |
|                              | <b>Operation</b><br><b>Standby</b><br><b>Power save</b>                                                                                                                                   | 600 watts ref.<br>200 watts | 1350 watts<br>1350 watts<br>45 watts |
| <b>Certification</b>         | Energy Star compliant                                                                                                                                                                     |                             |                                      |

### Current

|                         |                |                |
|-------------------------|----------------|----------------|
| <b>Mode</b>             | <b>Average</b> | <b>Maximum</b> |
| <b>Operation</b>        | 5 amperes      | 11 amperes     |
| <b>Standby</b>          | 1.7 amperes    | 11 amperes     |
| <b>Power saver mode</b> |                | 0.40 amperes   |

Environmental

|                   |                                                                                             |
|-------------------|---------------------------------------------------------------------------------------------|
| Noise level       | Printing: Less than 55 dB (A)<br>Standby: Less than 48 dB (A)                               |
| Relative humidity | Operating: 20-80% RH (non-condensing)<br>Transportation/Storage: 10-90% RH (non-condensing) |
| Temperature range | Operating: 50-90.5° F (10-32.5° C)<br>Transportation/Storage: 32-95° F (0-35° C)            |
| Altitude          | Operating: 0-8202 ft (0-2500 m)                                                             |
| Inclination       | Operating: Less than or equal to 1.5° from level                                            |



**Physical**

|                                | Main Body                                                                              | Main Body with Lower Input Feeder                                                      | Main Body with Duplexer and Lower Input Feeder                                                                     |
|--------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Dimensions                     | <b>W:</b> 24.2 in., 615 mm<br><b>H:</b> 16.5 in., 420 mm<br><b>D:</b> 21.3 in., 540 mm | <b>W:</b> 24.2 in., 615 mm<br><b>H:</b> 22.0 in., 560 mm<br><b>D:</b> 21.3 in., 540 mm | <b>W:</b> 24.2 in., 615 mm<br><b>H:</b> 24.0 in., 610 mm<br><b>D:</b> 24.4 in., 620 mm                             |
| Weight (excluding consumables) | <b>Unpacked:</b><br>101 lbs (46 kg)                                                    | <b>Unpacked:</b><br>Printer: 119 lbs (54 kg)<br>Lower Input Feeder:<br>24 lbs (11 kg)  | <b>Unpacked:</b><br>Printer: 119 lbs (54 kg)<br>Lower Input Feeder:<br>24 lbs (11 kg)<br>Duplexer: 26 lbs (12 kg)  |
| Weight (including consumables) | <b>Shipping:</b> 145 lbs (66 kg)                                                       | <b>Shipping*:</b><br>Printer: 145 lbs (66 kg)<br>Lower Input Feeder:<br>31 lbs (14 kg) | <b>Shipping*:</b><br>Printer: 145 lbs (66 kg)<br>Lower Input Feeder:<br>31 lbs (14 kg)<br>Duplexer: 35 lbs (16 kg) |
| Notes                          | * Shipped separately.                                                                  |                                                                                        |                                                                                                                    |

# Print Media

|                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Delivery</b>                                                                                                                                | <b>Output tray:</b> Face-down<br><b>Capacity:</b> 250 sheets of 20 lb bond (75 g/m <sup>2</sup> ) paper                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Input sources</b>                                                                                                                           | <b>Upper input feeder:</b> Envelopes, labels, paper, thick stock, transparencies<br><b>Optional lower input feeder:</b> Paper only                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Cassettes</b>                                                                                                                               | <b>Upper Input Feeder:</b> Universal cassette (250 sheet) and Letter/A4 (250 sheet)<br><b>Optional Lower Input Feeder(s):</b> Universal cassette (500 sheet)<br>Universal cassettes are not interchangeable between the upper and optional lower input feeder.<br>» <b>Note:</b> <i>For the magicolor 6100 Print System, universal is the cassette size, not the paper size called Universal on other QMS products.</i>                                                                                                           |
| <b>Cassette capacity</b>                                                                                                                       | <b>Upper Input Feeder</b><br><b>Loading height:</b> 1.02 in. (26 mm)<br><b>Paper:</b> About 250 sheets of 20 lb bond (75 g/m <sup>2</sup> ) paper<br><b>Transparencies:</b> About 50 sheets<br><b>Envelope:</b> Up to 15, depending on the thickness of the envelopes<br><b>Labels:</b> About 80 sheets<br><br><b>Lower Input Feeder</b><br><b>Loading height:</b> (52 mm)<br><b>Paper:</b> About 500 sheets of 75 g/m <sup>2</sup> paper                                                                                         |
| <b>Media sizes</b>                                                                                                                             | (See “Media Sizes and Imageable Areas” in chapter 4, “Media Information,” of your <i>Reference</i> manual.)                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Media types and weights</b><br>(For complete information, refer to chapter 4, “Media Information,” in your <i>Reference</i> manual.       ) | <b>Type:</b> Cut-sheet<br><b>Envelopes</b> 16–24 lb bond (60-90 g/m <sup>2</sup> )<br><b>Glossy Stock</b> 80 lb book (118 g/m <sup>2</sup> )<br><b>Labels</b> 24–42 lb (90–157 g/m <sup>2</sup> )<br><b>Paper:</b> Standard office 16–24 lb bond (60-90 g/m <sup>2</sup> )<br>» <b>Note:</b> <i>Do not print on perforated paper (including 3-hole-punched paper).</i><br><br><b>Thick Stock:</b> 24 lbs (90 g/m <sup>2</sup> ) to 43 lbs (163 g/m <sup>2</sup> )<br><b>Transparencies</b> 21–41.75 lb (90–157 g/m <sup>2</sup> ) |



|              |                                                                                                                                                                                                                             |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Notes</b> | <p>The maximum media weight supported for duplex printing is 28 lb bond (105 g/m<sup>2</sup>).</p> <p>Envelopes, transparencies, labels, transfer media and thick stock should be fed only from the upper input feeder.</p> |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## PC Cable Pinouts

### Centronics/IEEE 1284 Parallel

This table gives the pinouts for the printer end of the Centronics/IEEE 1284 parallel cable used to connect your printer to a computer.

| Signal Pin No. | Signal Description | Direction |
|----------------|--------------------|-----------|
| 1              | Strobe-            | In        |
| 2              | Data 1             | InOut     |
| 3              | Data 2             | InOut     |
| 4              | Data 3             | InOut     |
| 5              | Data 4             | InOut     |
| 6              | Data 5             | InOut     |
| 7              | Data 6             | InOut     |
| 8              | Data 7             | InOut     |
| 9              | Data 8             | InOut     |
| 10             | Acnlg-             | Out       |
| 11             | Busy+              | Out       |
| 12             | Pe+                | Out       |
| 13             | Select             | Out       |
| 14             | Autofeed           | In        |
| 15             | Reserved           | -         |
| 16             | Ground             | -         |
| 17             | Ground             | -         |
| 18             | Vcc Test           | -         |
| 19-30          | Ground             | -         |
| 31             | lprime             | In        |

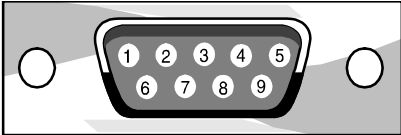
| Signal Pin No. | Signal Description | Direction |
|----------------|--------------------|-----------|
| 32             | Fault-             | Out       |
| 33             | Reserved           | -         |
| 34             | Reserved           | -         |
| 35             | Reserved           | -         |
| 36             | Selectin           | In        |

### Notes to the Table

- **Direction** refers to the direction of signal flow as viewed from the printer.
- **Return** denotes “twisted-pair return” and is to be connected at signal-ground level. When wiring the interface, be sure to use a twisted-pair cable for each signal and never fail to complete connection on the return side. To prevent noise effectively, these cables should be shielded and connected to the chassis of the system unit and printer, respectively.
- All interface conditions are based on Transistor-Transistor Logic (TTL) level. Both the rise and fall times of each signal must be less than 0.2 microseconds.
- Data transfer must be carried out by recognizing the ACKNLG or BUSY signal.
- The cable must have an overall braided shield, Belden 8345 or equivalent.
- Connectors must have shielded housings. The overall shield must be bonded to the shielded housings at both ends of the cable.

Serial

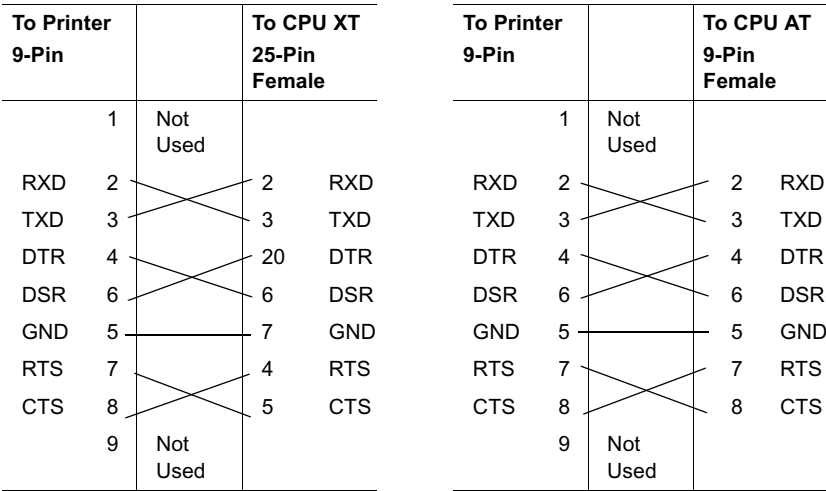
This table gives the correct pinouts for the 9-pin male RS-232 serial interface.

| Pin | Name                      | Pinout View from Printer Interface                                                 |
|-----|---------------------------|------------------------------------------------------------------------------------|
| 1   | Not Used                  |  |
| 2   | Receive Data (RXD)        |                                                                                    |
| 3   | Transmit Data (TXD)       |                                                                                    |
| 4   | Data Terminal Ready (DTR) |                                                                                    |
| 5   | Signal Ground (GND)       |                                                                                    |
| 6   | Data Set Ready (DSR)      |                                                                                    |
| 7   | Ready To Send (RTS)       |                                                                                    |
| 8   | Clear To Send (CTS)       |                                                                                    |
| 9   | Reserved                  |                                                                                    |

IBM PC/XT, PC/AT, and Compatible Computers

The following diagrams show the serial cable pinouts for IBM PC/XT, PC/AT, and compatible computers.

- » **Note:** *Not all serial cables are configured as shown and may require a null-modem adapter. Check with your cable vendor for compatibility.*



- » **Note:** *To download printer system software via the serial port, your hardware must have RTS and CTS support. Make sure that pins 4 and 5 on the 25-pin serial cable and pins 7 and 8 on the 9-pin serial cable are criss-crossed as shown in this diagram.*

LocalTalk

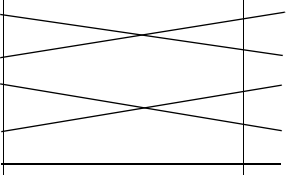
The following table provides the pinouts for the printer’s optional 8-pin LocalTalk interface:

| Pin   | Name                  | Looking into Printer Connector                                                     |
|-------|-----------------------|------------------------------------------------------------------------------------|
| 1,2,7 | Reserved              |  |
| 3     | Transmit Data - (TXD) |                                                                                    |
| 4     | Signal Ground (GND)   |                                                                                    |
| 5     | Receive Data - (RXD)  |                                                                                    |
| 6     | Transmit Data + (TXD) |                                                                                    |
| 8     | Receive Data + (RXD)  |                                                                                    |

Macintosh to Serial

The following table provides the pinouts for a cable connecting the Macintosh printer or modem port to the printer’s serial port:

» **Note:** To download printer system software from a Macintosh, you must have this type cable. Make sure pins 4 and 5 are crisscrossed as shown in this diagram.

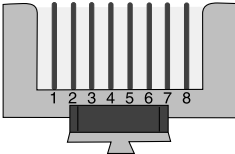
| To Macintosh<br>DIN-8 Male |      |                                                                                     | To Printer<br>DB-9 Female |     |
|----------------------------|------|-------------------------------------------------------------------------------------|---------------------------|-----|
| HandshakeOut               | 1    |  | 7                         | RTS |
| HandshakeIn                | 2    |                                                                                     | 8                         | CTS |
| TXD-                       | 3    |                                                                                     | 3                         | TXD |
| RXD-                       | 5    |                                                                                     | 2                         | RXD |
| GND,RXD+                   | 4,8* |                                                                                     | 5                         | GND |
|                            | 6    | Not Used                                                                            |                           |     |
|                            | 7    | Not Used                                                                            |                           |     |

\* Pins 4 and 8 must be connected together on the DIN-8 cable.

Ethernet

10BaseT/100BaseTX RJ45

The following table provides the pinouts for the 10BaseT/100BaseTX RJ45 Ethernet interface:

| Pin | Name            | Pinout View from Printer Interface                                                |
|-----|-----------------|-----------------------------------------------------------------------------------|
| 1   | Transmit Data + |  |
| 2   | Transmit Data - |                                                                                   |
| 3   | Receive Data +  |                                                                                   |
| 4   | No Contact      |                                                                                   |
| 5   | No Contact      |                                                                                   |
| 6   | Receive Data -  |                                                                                   |
| 7   | No Contact      |                                                                                   |
| 8   | No Contact      |                                                                                   |

# Regulatory

|                                            |                                                                                         |                                                               |
|--------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------|
| <b>CE Marking</b>                          | <b>International (EU)</b><br>EN 55022 Class A ITE<br>EN 60950<br>IEC 801-2<br>IEC 801-3 | Emissions<br>Product Safety<br>ESD<br>Radiated Susceptibility |
| <b>cTick Mark</b>                          | <b>ACA (Australia)</b><br>AS/NZS 4251<br>AS/NZS 3458                                    | Generic Emissions Standard<br>ITE                             |
| <b>Electromagnetic Compatibility (EMC)</b> | <b>International (EU)</b><br>IEC 801-2<br>IEC 801-3<br>IEC 801-4                        | ESD<br>Radiated susceptibility<br>Fast transients             |
| <b>Electromagnetic Emissions (EMI)</b>     | <b>FCC (USA)</b><br>Title 47 CFR Ch. I,<br>Part 15                                      | Class A Digital Device                                        |
|                                            | <b>Industry Canada (Canada)</b><br>ICES-003 Issue 3                                     | Class A Digital Device                                        |
|                                            | <b>International (EU)</b><br>EN 55022                                                   | Class A ITE                                                   |
|                                            | <b>VCCI (Japan)</b><br>VCCI V-3/97.04                                                   | Class A ITE                                                   |
| <b>Energy Saver</b>                        | <b>Energy Star (USA)</b>                                                                | Energy Star Compliant                                         |
| <b>Product Safety</b>                      | <b>UL (USA)</b>                                                                         | UL 1950, Third Edition                                        |
|                                            | <b>cUL (Canada)</b>                                                                     | CAN/CSA C22.2 No. 950-93                                      |
|                                            | <b>International (EU)</b>                                                               | EN 60950 : 1992                                               |
| <b>Laser Safety</b>                        | <b>CDRH (USA)</b>                                                                       | Title 21 CFR Ch. I,<br>Subchapter J                           |
|                                            | <b>International (EU)</b>                                                               | IEC 825 and/or EN 60825                                       |

# Warranty Considerations

Various factors can affect a printer's warranty. Two important ones are consumables and electrostatic discharge. Read your printer warranty carefully, and then store it in a safe place.

- » **Note:** *Don't return any merchandise to the manufacturer without calling for a return merchandise authorization (RMA) number. Contact your local vendor or the QMS Customer Response Center (CRC) where you can obtain an RMA number.*

## Consumables and Your Warranty

The use of non-QMS consumables and/or accessories alone does not affect either your warranty or any maintenance contract you may have purchased. However, if QMS printer failure or damage is found to be directly attributable to the use of non-QMS consumables and/or accessories, QMS will not repair the printer free of charge. In this case, standard time and material charges will be applied to service your printer for that particular failure or damage. QMS recommends that you use only QMS consumables and accessories to support your printer. To order QMS consumables and accessories in the US, call (800) 523-2696. In all other countries, check appendix A, "QMS Customer Support," for the QMS office closest to you.

## Electrostatic Discharge and Your Warranty

It's very important to protect the printer controller board and other printer circuit boards from electrostatic damage.

**If an antistatic wrist strap is provided** in your printer option kit, attach one end of it to your wrist and the other end to any convenient electrical ground. The bare metal chassis of equipment, such as on the back of a computer, is suitable if it is plugged in but **turned off**. **Never attach the wrist strap to any piece of equipment with an electrical current present.** Turn off all power switches first. Plastic, rubber, wood, painted metal surfaces, and telephones are not acceptable grounding points. The printer isn't an acceptable grounding point either because it must be unplugged before you perform this task.



**If you don't have an antistatic wrist strap**, discharge your body's static electric charge by touching a grounded surface before you handle any printer boards or components and before removing the controller board cover. If you must walk around before completing your task, discharge your body's static electric charge again before touching the printer controller board.



